REMARKS

Applicants note that it appears that some of the references listed on pages 1 and 6 of the Information Disclosure Statement filed July 26, 2002 have not been considered by the Examiner. These pages and copies of the un-initialed references are attached hereto for the Examiner's reference.

In the Office Action dated November 14, 2006, the Examiner rejected Claims 22, 36 through 38, 40, and 42 through 47 under 35 U.S.C. § 103(a) as being unpatentable U.S. Patent No. 5,496,099 to Resch in view of U.S. Patent No. 4,143, 514 to Leiber and U.S. Patent No. 5,261,730 to Steiner et al. (Steiner '730) or U.S. Patent No. 5,123,713 to Steiner (Steiner '713). Applicants respectfully disagree.

The Examiner has asserted that the pump 127 of the Resch reference can be the normal hydraulic energy source. The Examiner has also asserted that "the separator units at 41-44 in Steiner '730 or at 24, 26 in Steiner '713" are "an obvious alternative equivalent arrangement to the arrangement shown at 59,68 of the Resch reference."

The Resch reference discloses an auxiliary cylinder 59 including a housing 68 that is provided so that "brake fluid can be displaced at a controllable pressure level into the front-axle brake circuit I in a sufficient quantity." See Col. 12, lines 32-38. The auxiliary cylinder 59 is interposed between the master cylinder 18 and the wheel brakes 11, 12. Even if the separator units 41-44 of the Steiner '730 reference or the separator units 24, 26 of the Steiner '713 reference could be substituted for the auxiliary cylinder 59 of the Resch reference as proposed by the Examiner, the combination does not produce the invention as claimed, as will be described below.

Independent Claim 22 defines the invention as a normal hydraulic energy source having electrically controllable brake valve devices disposed between the energy source and the wheel brakes. Claim 22 further includes the limitation "a respective fluid separator unit being interposed between each of said first and second wheel brakes of said first vehicle axle and an associated one of the electrically controllable brake valve devices." If the separator units 41-44 of the Steiner reference are substituted for the auxiliary cylinder 59 in the Resch reference, the fluid separator units would <u>not be interposed</u> between each of the wheel brakes and the respective

electrically controllable brake valve devices with the electrically controllable brake valve devices disposed between the normal energy source and the wheel brakes as defined in Claim 22. Therefore, the combination proposed by the Examiner does not produce the invention as defined in Claim 22. Thus, Applicants believe that Claim 22 is patentable over the combination of references proposed by the Examiner.

The Examiner has asserted that the pump 127 of the Resch reference can be the normal hydraulic energy source and the master cylinder 18 can be the backup energy source. The Resch reference teaches a first backup conduit extending between the master cylinder 18 and the wheel brake 14. The Resch reference further teaches a second backup conduit extending from the wheel brake 13 to an intersection with the first backup conduit. Thus, the Resch reference clearly does not show or suggest a first backup extending between the master cylinder 18 and a first wheel brake and a second backup extending between the master cylinder 18 and a second wheel brake. In contrast, Independent Claim 36 includes the limitations "a first backup fluid conduit extending between said master cylinder and said first wheel brake" and "a second backup fluid conduit extending between said master cylinder and said second wheel brake." Since the Resch reference does not teach both a first and second backup fluid conduit each extending between the master cylinder and a wheel brake, the combination proposed by the Examiner does not produce the invention as defined in Claim 36. Thus, Applicants believe that Claim 36 is patentable over the combination of references proposed by the Examiner.

Independent Claim 37 defines the invention as including electrically controllable brake valve devices disposed between the energy source and the wheel brakes. Claim 37 further includes the limitation "a respective fluid separator unit being interposed between each of said first and second wheel brakes of said first vehicle axle and an associated one of the electrically controllable brake valve devices." If the separator units 41-44 of the Steiner reference are substituted for the auxiliary cylinder 59 in the Resch reference, the fluid separator units would not be interposed between each of said first and second wheel brakes of said first vehicle axle and an associated one of the electrically controllable brake valve devices with the

electrically controllable brake valve devices disposed between the energy source and the wheel brakes as defined in Claim 37. Therefore, the combination proposed by the Examiner does not produce the invention as defined in Claim 37. Thus, Applicants believe that Claim 37 is patentable over the combination of references proposed by the Examiner.

Independent Claim 38 includes the limitations "wheel brakes for two wheels, in which the wheels are distributed at each end of a front vehicle axle" and "a master cylinder supplying two brake circuits, ..., each of said brake circuits being in fluid communication with a respective one of said wheel brakes." The Resch reference does not teach that each of the front axle wheel brakes 11, 12 (see Col. 12, line 20) are individually supplied by a respective circuit from the master cylinder. Therefore, the combination proposed by the Examiner does not produce the invention as defined in Claim 38. Thus, Applicants believe that Claim 38 is patentable over the combination of references proposed by the Examiner.

Similarly, independent Claim 40 includes the limitations "wheel brakes for two wheels, in which the wheels are distributed at each end of a front vehicle axle," and "a master cylinder supplying two brake circuits, ..., each of said brake circuits being in fluid communication with a respective one of said wheel brakes." The Resch reference does not teach that each of the front axle wheel brakes 11, 12 are individually supplied by a respective circuit from the master cylinder. Therefore, the combination proposed by the Examiner does not produce the invention as defined in Claim 40. Thus, Applicants believe that Claim 40 is patentable over the combination of references proposed by the Examiner.

The Examiner rejected independent Claim 42, and the claims dependent thereon, asserting on page 4 of the Office Action that the limitations of "blend control" of the first and second signals merely amount to "equivalent to the multiple signal processing discussed in Steiner '730." Applicants respectfully disagree, noting that the Steiner '730 reference does not teach how or if the position signal and the pressure signal are combined. For example, the pressure signal could merely be substituted for the position signal under certain conditions, such that the signals are not blended at all.

Independent Claim 42 defines the invention as a brake system including a control unit responsive to a demand signal for controlling the operation of the vehicle brake, the demand signal being generated as a blended function of both the first output signal and the second output signal. As discussed in the preceding paragraph, the Steiner '730 reference does not teach a demand signal generated as a blended function of both the first output signal and the second output signal. Therefore, the combination proposed by the Examiner does not produce the invention as defined in Claim 42. Thus, Applicants believe that Claim 42 is patentable over the combination of references proposed by the Examiner.

Claims 43 through 47 are dependent upon independent Claim 42 and include all of the limitations recited therein. Accordingly, for the reasons given above, Applicants also believe that Claims 43 through 47 are patentable over the cited references and respectfully request that the Examiner withdraw his rejection of these claims.

New Claim 48 defines the invention as a brake system including a control unit responsive to a demand signal for controlling the brake system actuator. The demand signal is generated as a blended function of both the stroke signal and the second signal wherein, during a first part of the stroke of the brake pedal, the stroke signal is weighted greater than the second signal, and wherein, during a second part of the stroke of the brake pedal, the second signal is weighted greater than the stroke signal. The Steiner '730 reference does not teach a demand signal as defined in Claim 48. Thus, Applicants believe that Claim 48 is patentable over the combination of references proposed by the Examiner.

New Claim 49 is similar to previously presented Claim 38 and Applicants believe that Claim 49 is patentable for the reasons described above for Claim 38. Additionally, Claim 49 includes the limitation that the master cylinder is in fluid communication with at least one of the wheel brakes upon at least one of loss of electrical power at the electrically controllable brake valve devices and loss of pressure in the normal source.

In paragraph 6 of the Office Action, the Examiner appears to be saying that the Lieber '514 reference is only relied upon to show the use of a pump as a normal source. Clearly then, the Lieber '514 reference addresses none of the deficiencies of the Resch, the Steiner '713, or the Steiner '730 references discussed above. Accordingly, Applicants believe that the claims are patentable over the Examiner's proposed combination of references including the Lieber '514 reference.

It is believed that Claims 1 through 20 and 22 through 49 are in condition for allowance. Return of the original copy of the patent will be occur when Applicants' attorney is notified that all claims are allowed, and no other issues remain to be resolved.

Respectfully submitted,

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